

1 1. (Amended) A communication interface device for managing wireless data
2 communications between an in-vehicle device installed in a vehicle and a
3 plurality of global network based data processing resources, said communication
4 interface device being located external to said vehicle, said communication
5 interface device comprising:

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7 a controller;

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9 a wireless transceiver interconnected with said controller for wirelessly data
10 communicating between said in-vehicle device and said communication
11 interface device;

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13 a plurality of communication interfaces interconnected with said controller for
14 data communicating between said communication interface device and said
15 plurality of global network based data processing resources; and

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17 a memory interconnected with said controller for managing data
18 communication between said wireless transceiver, and said plurality of
19 communication means;

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21 wherein, data communication between said in-vehicle device and said plurality of
22 global network based data processing resources is effectuated by way of said
23 communication interface device.

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1 2. (Amended) The communication interface device in accordance with claim 1,
2 wherein said plurality of communication interfaces includes at least one of the
3 following communication interface types: a universal serial bus port, a personal
4 data assistant interface, an RS232 interface, an RS485 interface, a carrier current

5 interface, a network connection to the internet, a modem interface, a wireless
6 modem interface, a cellular phone transceiver, a cellular phone interface, a
7 wireless data link, or a local area network interface.

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3. (Amended) The communication interface device in accordance with claim 1,
wherein said plurality of interfaces is a computer interface to a computer, said
computer having data communication access to said plurality of global network
based data processing resources, such that said in-vehicle device, by way of said
computer interface, data communicates with at least one of the following: said
computer, or said plurality of global network based data processing resources.
4. (Amended) The communication interface device in accordance with claim 1,
wherein said communication interface device and said in-vehicle device data
communicate with at least one of the following: a programmable storage device, a
computer, a pocket sized personal computer, a pager, a wireless phone, or a
personal data assistant.
5. (Amended) The communication interface device in accordance with claim 1,
wherein said communication interface device is an internet appliance device.
6. (Amended) The communication interface device in accordance with claim 1,
wherein said communication interface device is interconnected with at least one
of the following: a computer, a pocket sized personal computer, a point of sale
system, a database, a garage door opener, a gas pump, a toll booth, a change toll
booth, a wireless toll-pass system, a traffic light pole, a pole, a traffic light, a
parking gate, a parking terminal, a store display, an internet appliance device, or a
vehicle analyzer.

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1 7. (Amended) A method of monitoring the location of a vehicle equipped with an in-
2 vehicle device, said in-vehicle device wirelessly data communicates with a
3 plurality of global network based data processing resources, wherein wireless data
4 communication between said in-vehicle device and said plurality of global
5 network based data processing resources is effectuated by a communication
6 interface device, said method comprising the steps of:

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8 from said communication interface device client side:

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10 a) receiving a data communication at said communication interface device
11 from said in-vehicle device, said data communication occurring when said in-
12 vehicle device is in wireless proximity with said communication interface
13 device;

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15 b) routing said data communication to said plurality of global network based
16 data processing resources;

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18 c) receiving a plurality of return data from said plurality of global network
19 based data processing resources;

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21 d) communicating wirelessly said plurality of return data to said in-vehicle
22 device;

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24 from said plurality of global network based data processing resources server side:

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26 e) identifying said data communication received from said communication
27 interface device;

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29 f) modifying a vehicle location database;

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31 g) determining appropriate said plurality of return data; and

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33 h) communicating said plurality of return data to said communication
34 interface device for wireless data communication to said in-vehicle device.
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1 8. (Amended) The method of monitoring the location of a vehicle in accordance
2 with claim 7, wherein the step of receiving return data includes receiving
3 command and control data from said plurality of global network based data
4 processing resources.

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1 9. (Amended) The method of monitoring the location of a vehicle in accordance
2 with claim 7, wherein said communication interface device is an internet
3 appliance device.
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1 10. (Amended) The method of monitoring the location of a vehicle in accordance
2 with claim 7, wherein the step of modifying a vehicle location database includes
3 modifying said vehicle location database for at least one of the following
4 applications: regulating attendance based on said vehicle entry to or exit from a
5 parking area, enabling or disabling operation of said vehicle when said vehicle
6 passes in wireless proximity to said communication interface device, route or trip
7 progress tracking of said vehicle, calculating said vehicle rate of speed between a
8 plurality of checkpoints, or calculating said vehicle rate of speed between said
9 plurality of checkpoints for the purpose of identifying speeders.
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1 11. (Amended) A method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device installed in a vehicle, said method comprising the steps of:

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5 a) initiating data communication between said wireless device and said in-
6 vehicle device;

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8 b) communicating a plurality of data between said in-vehicle device and said
9 wireless device;

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11 c) routing said plurality of data from said wireless device to a communication
12 interface device, said communication interface device having data
13 communication access to a plurality of global network base data processing
14 resources;

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16 d) receiving at said wireless device a plurality of return data as required from
17 said plurality of global network based data processing resources by way of
18 said communication interface device; and

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20 e) communicating said plurality of return data between said wireless device
21 and said in-vehicle device.

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1 12. (Amended) The method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device in accordance with claim 11, wherein the step of communicating a
4 plurality of data between said in-vehicle device and said wireless device includes
5 data communicating at least one of the following types of data: said vehicle data,
6 said vehicle telemetry data, said vehicle metric data, said in-vehicle device data,
7 said in-vehicle device digital content, said in-vehicle device settings, said vehicle
8 data, said in-vehicle device system preferences, said in-vehicle device digital
9 audio content, or said in-vehicle device digital video content.
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1 13. (Amended) The method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device in accordance with claim 11, wherein said wireless device is at least one of
4 the following: a wireless phone, a personal data assistant, a pager, a pocket sized
5 personal computer, an internet appliance device, or a programmable data storage
6 device.

1 14. (Amended) The method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device in accordance with claim 11, wherein said wireless device data
4 communicates with said in-vehicle device by way of at least one of the following
5 methods: hard wired connection, infrared connection, BLUETOOTH standard and
6 protocol, or WIRELESS APPLICATION PROTOCOL and standard.

1 15. (Amended) The method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device in accordance with claim 11, wherein said communication interface device
4 is an internet appliance device.

1 16. (Amended) The method of data communicating between a wireless device, a
2 plurality of global network based data processing resources, and an in-vehicle
3 device in accordance with claim 11, wherein said communication interface device
4 is interconnected with an internet appliance device.

1 17. (Amended) A method of servicing a vehicle including procuring automotive
2 replacement parts from a communication interface device, said communication
3 interface device being accessible by a customer, said communication interface
4 interface device being accessible by a customer, said communication interface

9 device being located in an auto parts store, an auto parts area, a vehicle service
10 center, or a vehicle sales center, said method comprising the steps of:

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12 a) allowing said customer to interact with said communication interface
13 device;

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15 b) accessing digital content to aid said customer in a plurality of services or
16 products selection, wherein accessing digital content includes accessing at
17 least one of the following: local digital content, databases, or a plurality of
18 global network based data processing resources;

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20 c) presenting digital content to said customer, including digital content related
21 to said plurality of services or products;

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23 d) allowing said customer to physically select at least one of said plurality of
24 services or products from on-hand inventory;

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26 e) determining, through customer interaction with said communication
27 interface device, if said customer successfully physically selected at least one
28 of said plurality of services or products from on-hand inventory;

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30 f) allowing as required said customer to order any one or more of said
31 plurality of services or products by way of said communication interface
32 device; and

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34 g) effectuating as required an e-commerce transaction, or an e-business
35 transaction to fulfill said customer's order.
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1 18. (Amended) The method of servicing a vehicle in accordance with claim 17 further
2 comprising the step of:

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4 a) charging a plurality of fees for at least one of the following: said e-
5 commerce transaction, said e-business transaction, digital content, said
6 plurality of services or products, distributing said plurality of digital content,
7 for royalty payments, for service fees, for download charge, for network time,
8 for digital content access, time utilized charge, or for facilitating an e-
9 commerce or e-business transaction.

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1 20. (Amended) The method of servicing a vehicle in accordance with claim 17,
2 wherein the step of allowing a user to interact with said communication interface
3 device includes at least one of the following interactions: transferring data
4 between a wireless device and said communication interface device, manually
5 interacting with said communication interface device, voice recognition,
6 biometric recognition, keypad, general purpose said communication interface
7 device input or output, or touch screen input.

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1 21. (Amended) The method of servicing a vehicle in accordance with claim 20,
2 wherein said wireless device is at least one of the following: a wireless phone, a
3 personal data assistant, a pager, a pocket sized personal computer, an internet
4 appliance device, or a programmable data storage device.

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1 22. (Amended) A method of using a wireless device to transfer data between an in-
2 vehicle device installed in a vehicle and a computer located external to said
3 vehicle, said computer being interconnected with a communication interface
4 device, said computer data communicates with said wireless device by way of
5 said communication interface device comprising the steps of:

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a) initiating a data communication between said wireless device and said in-vehicle device;

b) transferring data between said wireless device and said in-vehicle device;

c) transporting said wireless device to a physical location external to said vehicle and in wireless proximity to said communication interface device, wherein data communication between said wireless device and said communication interface device is effectuated;

d) initiating a data communication between said wireless device and said communication interface device; and

e) transferring data between said wireless device and said computer by way of said communication interface device.

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23. (Amended) The method of using a wireless device to transfer data in accordance with claim 22, wherein said wireless device is at least one of the following: a wireless phone, a personal data assistant, a pager, a pocket sized personal computer, an internet appliance device, or a programmable data storage device.

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24. (Newly Added) The method of using a wireless device to transfer data in accordance with claim 22, wherein transferring data in steps b and e includes transferring data related to at least one of the following: data related to said vehicle, data related to said in-vehicle device, data related to said wireless device, data related to a user, data related to said user preferences, data from said computer, data stored within said wireless device or accessible by said wireless

7 device, a database, or data from said plurality of global network based data
8 processing resources
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10 25. (Newly Added) The communication interface device in accordance with claim 1,
11 wherein:
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1 data communicated between said in-vehicle device and said wireless
2 transceiver is processed and or routed by said controller to said plurality of
3 communication means for data communication to said plurality of global
4 network based data processing resources; and or
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6 data communicated between said plurality of communication interfaces is
7 processed and or routed by said controller to said wireless transceiver for data
8 communication to said in-vehicle device
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10 26. (Newly Added) The communication interface device in accordance with claim 1,
11 wherein the managing of data communication between said in-vehicle device and
12 said plurality of global network based data processing resources includes data and
1 or protocol conversion between said wireless transceiver and or said plurality of
2 communication means.
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4 27. (Newly Added) The communication interface device in accordance with claim 1,
5 wherein said communication interface device manages data communication data
6 flow including caching data communications from said wireless transceiver and or
7 from said plurality of communication interfaces.
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9 28. (Newly Added) The communication interface device in accordance with claim 4
10 wherein, data communication between said in-vehicle device and said
11 communication interface device is effectuated by transferring data between at
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cost a
4 least one of the following: said computer, said pocket sized personal computer, a
5 point of sale system, said programmable storage device, said personal data
6 assistant, said pager, or said wireless phone.
7 *submit*

1 29. (Newly Added) The communication interface device in accordance with claim 27
2 wherein, a user effectuates the data communication between said communication
3 interface and said in-vehicle device by physically carrying the data
4 communication device between said in-vehicle device and said communication
5 interface.
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1 30. (Newly Added) The method of monitoring the location of a vehicle in accordance
2 with claim 8, wherein command and control data can includes enabling or
3 disabling operation of said vehicle.
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